ABSTRACT OF THE DISCLOSURE

An apparatus and method prevent an out-of-sync state of clocks from occurring in an IP network or an IP-based radio access network in which network fluctuation delays occur. A synchronous server includes a clock generator configured to periodically generate a clock and a synchronous message transmitter configured to generate a synchronous message for notifying information regarding the generated clock, and to transmit the generated synchronous message to the node using an IP packet. The node includes a time calculator configured to obtain a time of receiving the synchronous message and a clock correction processor configured to calculate a clock correction value in accordance with the time of receiving the synchronous message and the information regarding the clock notified by the synchronous message, and to correct a generated timing of a clock in the node in accordance with the clock correction value.